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COVER: Ever since physicians went to sea aboard the nation's first naval vessels, fleet support has been the primary mission of the Navy Medical Corps. To honor the 105th anniversary, on 3 March, of legislative recognition of the Medical Corps, our cover illustrates fleet support in action. This photograph, drawn from the files of the Navy History Division, shows a U.S. Navy surgeon from the USS *Chicago* boarding a French submarine chaser on the open sea during World War I in answer to a call.

Program Planning and Analysis

One result of the Bureau's reorganization last year was the establishment of a new organizational entity, Code 02, Program Planning and Analysis (PPA). I consider this new organization vital to the future of Navy Medicine and have asked CAPT Pete Flynn, its deputy director, to provide a report of its current status. I think you will find his words both interesting and stimulating.

BUMED's PPA Code consists of three major divisions, each with a differing mission, but bound together by an overriding broad and impartial view of the activities of the Medical Department.

Code 021, Program Planning Division, has the critical mission of planning our programs, preparing the supporting information, and making critical presentations to CNO, DOD, and Congress necessary to obtain our resources in the form of people, dollars, buildings, and equipment. Improved performance by the Bureau in this area is essential to our future well-being. One of the major accomplishments of the code in this year's Program Objective Memorandum (POM) process has been the education of a significant number of the Bureau's managers in the nature and use of this fundamental process by which we justify, obtain, and distribute Medical Department resources. Preliminary reaction indicates that our efforts have been both successful and appreciated. We expect continued improvement in the future.

Code 022, Management Information Division, has the mission to develop a coordinated management information program for use by both Bureau and field activities. A heterogeneous collection of information systems has come into being haphazardly over recent years. There are known gaps, duplications, and inconsistencies which must be eliminated. This effort



involves detailed work with the various functional managers within the Bureau to determine and ultimately provide precisely the information they require to accomplish their tasks. In addition, this system will ultimately provide top management with data regarding the performance of the system as a whole. This will be a critical item as accountability becomes increasingly sharply focused in American medicine.

Code 023, Systems Analysis, which is the last of the codes to come on line, will be involved with the systematic evaluation of elements of the Medical Department. The emphasis of this division will be on change: for example, assessing the advantages, risks, and costs of new ways of achieving Medical Department objectives.

An important factor in the activities just mentioned, in which we learn from the past and examine the present, will be the continuing education of the staff members of the code for the broadest possible base in both management and medicine. This will be the foundation from which the Navy Medical Department can guide and control its future, and respond appropriately to such outside forces as the

OMB/DOD/HEW Study of Military Health Care.

If the activities outlined above are heavily oriented to the here and now, the code as a whole also has an important charge to plan for a future in which we expect continuing major changes in the scope and nature of medicine in this country. The Medical Department must have a clear set of goals, both from a purely medical point of view, and to satisfy the requirements of the Navy and Marine Corps. We hope to consider the system as it might be, so that we not only have a clear concept of what the Medical Department should be, say ten years hence, but will have also considered and planned for the expected medical environment of the United States ten years from now. Thus the future will come not as a shock, but as something expected and anticipated.

The problems confronting medicine, both military and civilian, are broad and deep. The code's considerations must include such diverse areas as the social and ethical issues facing medicine, the proper organization of health care, the appropriate organization of practice, the issues of control, consumerism, and accountability, the scope and role of medical education, and the legal issues facing medicine.

These are the highlights of the fundamental issues which confront military medicine and for which we hope to find workable solutions which will satisfy our patients, our staff, and the Navy. We see this as an exciting and challenging task.

Surgeon General of the Navy

The Surgeon General's Seventh Annual Specialties Advisory Conference and Committees' Meeting

THIRD PLENARY SESSION 12 SEPTEMBER 1975

CAPT M.J. Valaske (Moderator): In this third plenary session we will put forth for discussion topics of overriding interest to the Medical Department. VADM D.L. Custis, as Surgeon General of the Navy, will comment on each item, and will answer any questions you might have.

We will begin with the report from the Director of Clinical Services' Committee. If we can agree on this statement, it may serve as a background for communication with the line, a platform for recruitment and retention, and a base from which allocation and reallocation of resources can be made. We call it "Theorems for Navy Medicine":

- Military medicine is comprehensive medicine, differing in no way from medicine generally except that it is sometimes provided under unique and varied circumstances in which the customary patient-physician relationship may be subordinated to line command requirements.
- Navy medicine is an integral component of the Navy Department.
- A naval medical officer is uniquely that: a physician and officer, neither one to the exclusion of the other, but both.
- There can be no room for divided loyalties in this profession.
- In order to maintain a complete and effective naval medical capability, it is necessary that we maintain a capability to provide a full spectrum of professional services, training, research, and

This account of the SAC 7 third plenary session is an edited (sometimes paraphrased or abbreviated) version of the remarks and presentations of specified individuals. Their comments do not necessarily reflect official views of the Navy Department or the naval service at large.

SAC 7 was held 8-12 September 1975. The first plenary session was reported in the January 1976 issue of *U.S. Navy Medicine*. The second plenary session was reported in the February issue.

practice opportunities, and provisions for administrative pathways to effectively allocate our resources both during peacetime and when at war.

- Full integration and coordination of the daily practice of military medicine in its broadest sense, including industrial and occupational health, ambulatory health care, inpatient services, preventive medicine, and social and rehabilitative services, within the mainstream of Navy Department activities is in the best interests of the Medical Department individually and the Navy Department collectively.

- Credibility for Navy medicine, both within and without the Department of the Navy, in the future, as in the past, depends on a clear understanding and acceptance of these premises.

DISCUSSION

CAPT F. Austin: There is a requirement to increase the professional satisfaction of branch dispensary medical officers, including those who are operationally assigned, in their daily practice of outpatient medicine. They sometimes feel that they are second-class citizens. Can the hospital staff, and particularly, the medical education system, be used in a structured way to make available to these physicians creditable, continuing medical education? Time spent in outpatient and emergency duty could be made much more tolerable if some portion of this service were accepted by a specialty board.

VADM D.L. Custis: I think that's a very real problem, and although we've talked about it, we really haven't given it the attention it deserves, or exploited our potential to correct it. Regionalization certainly is an important element with potential for correcting this problem. The restructured, command-aligned education and training resource that we have now is much better able to address this problem than anything we had before.

I suppose the whole problem of traveling beyond the region—“corporate limits,” I think it’s called—may present some difficulty; but I think the individual concerned would be so interested in his continuing medical education that he wouldn’t insist on corporate limits as a source of funding for such efforts. This is another problem that can be better handled as our manpower stabilizes.

It’s one thing to have the feeling of being a second-class professional, but it’s something else to know that this is part of a career ladder and there is a better day coming. I think that a lot of the resentment from the dispensary physician stems from the era of the draft—the two-year Reservist who feels that he is not a part of the system. And indeed, there is not enough effort made to convince him that he *is* a part of the system. The morale factor there reflects what the situation has been in the past, but it could be changed in the future.

“Financial Support in Program Planning Requirements”

CAPT W.M. McDermott, MC, USN
Deputy to Special Assistant for Medical
Department Education and Training
BUMED Code 0011-1

As you all are aware, in the past we have supported a Visiting Chiefs Program, intended to place trained people in areas where their expertise could be of greatest value. In its conceptualization, it was magnificent. But in the reorganization of BUMED’s financial assets, the funding lines for this program were lost. Because funds were not available, we were not able to carry out this program this year.

A letter has now been sent from the assistant chief for human resources and professional operations (BUMED Code 3) to the commanding officer of the Naval Health Sciences Education and Training Command requesting that this program come under HSETC direction. Obviously, a program with no money is of little value. So it may be a year or so before we’re able to make this change. But the program has value, and it’s needed. It could help us to get our training leaders out to the various areas where they could be of most value. And certainly, it will help give us feedback from the areas where we most need it.

DISCUSSION

VADM Custis: I don’t know that I can add much except to support that opinion. As the Uniformed Services University of the Health Sciences comes into being, it’s going to be much easier for them to fund the Visiting Chiefs Program in affiliated hospitals than it has been for us to obtain these funds in a very competitive resource market. This year, travel funds for this sort of endeavor have been limited. If I remember the figures correctly, we started off with more than \$4 million for travel, and we wound up with something like \$2 million. I think that with the University, it will be much easier to justify the funds necessary for this sort of thing.

“Proposal for Graduate-Level-One Training Appropriate to Multiple Specialty Reentry at Graduate-Level-Two and/or Interim Primary Care for Operational Medical Duty Assignments”

CAPT R.W. Cantrell, MC, USN
Chief, ENT Service
Naval Regional Medical Center
San Diego, California

Earlier this year the American College of Surgeons developed a plan for the first year of graduate medical education. Their proposal calls for three months of internal medicine, one month of emergency room experience, four months of surgery, and four months of an elective. This year would be known as the “Basic Surgery One Year,” and it would satisfy the first-year requirements for most surgical specialties.

The departments of general surgery, orthopedics, otolaryngology, and urology at NRMHC San Diego have studied and accepted this plan. With BUMED’s approval, we will accept approximately 17 G-1 trainees in July 1977 who, after successful completion of this program, will qualify for further training in any one of these specialties.

We believe a similar “Basic Medicine One” plan could be developed for medical specialties, and we urge consideration by the specialties of Ob/Gyn, pathology, pediatrics, psychiatry, and radiology. Not only is this excellent preparation for further training in any specialty, but it would also prepare medical officers for primary care or operational duty should they not be immediately

accepted for training. The thrust of Navy graduate medical education should be so structured that large numbers of G-1 trainees are guided into operational duty with the full assurance that they will receive highest priority for acceptance back into the naval training continuum upon completion of their operational duty. It should be made clear to all trainees that operational assignments are preferable *prior* to residency training, rather than afterwards. We urge that all specialties adopt this plan to preclude any possible discriminatory advantage being accorded to the specialties that do not comply.

DISCUSSION

VADM Custis: Well, I subscribe 100% to that philosophy. I've always thought that the Millis Report may smell like a rose, but it had quite a few thorns. The destruction of the internship is one of them. What you're doing, really, is redesigning—in a military environment, particularly—the needs for the G-1 year. I heartily agree with it.

Participant: Is this a basic, first-year surgical graduate medical education care curriculum, from which the residents later can branch off into the surgical specialties?

CAPT Cantrell: Yes.

Participant: But we still have to consider training requirements. If 19 residents complete G-1, we can't afford to have all 19 go into general surgery afterwards. We have to have some sort of commitment as to whether they are going to be an orthopedist or an obstetrician, for example, because one thing we can't afford in the next ten years is to overtrain one specialty to the detriment of another if our requirements call for a mix.

RADM E.J. Rupnik: In the past, I believe we've done a terrible job trying to predict what our training requirements would be. But lately we've made an attempt to identify our requirements by coming up with a list of assumptions. To the extent that our assumptions are correct, we think that we can very accurately predict our need five years down the road. These assumptions were approved by every single-digit code within BUMED, as well as by the Surgeon General and Deputy Surgeon General. So we think that they are fairly accurate. This is the five-year plan that we will use to determine how many scholarship students, in which specialties, we will put into the Navy active-duty deferment system. We will also

use this plan to determine which students we will place in our own specialty programs.

One of the big problems that we've had in the past is our willingness to allow Berry Plan physicians to continue into subspecialty training with no thought given to how we will use these subspecialists later. This will no longer be permitted. If we have a need for a subspecialist, the student will be informed of our need and allowed to proceed with his or her training. But, if he's a general surgeon, for example, who wants thoracic surgery training when we don't have a need for more thoracic surgeons, he will not be granted permission to continue training. He will be asked to serve as a general surgeon, not as a thoracic surgeon.

CAPT Cantrell: May I also respond to that, Admiral? The total number of first-year G-1 trainees in the Basic Surgery One year may not exceed the total number of G-2 positions offered by the participating surgical specialties. That is already a finite number. For instance, in the Otolaryngology Service at San Diego, it's three. Our share, as it were, of the G-1's would be three.

This program has a real advantage: Take, for example, a junior medical student who knows that he wants to go into surgery, but hasn't yet decided on an individual specialty. He would have the option of changing at the middle of his internship. Probably in the long run the distribution would average out, with each specialty receiving a share of physicians.

CAPT McDermott: This method would also serve as an acceptable entry point into other specialties that are espousing a more flexible base. So it is really of great value to us.

We're going to have to coordinate a lot with the American Medical Association and the various councils and coordinating groups in order to get the program identified, but I think it has high priority. And again, in support of what Dr. Cantrell said, the number of trainees that would be identified would be no greater than the composite of the category or diversified category that any single hospital will have set up in support of its G-2 positions. So we wouldn't be asking for an increase in numbers. And we really should be able to develop a better training program using this method.

CAPT D. Wilson: I don't see any conflict between the G-1 year and continuing education in military medicine, or Navy medicine with continued training in aerospace or undersea medi-

cine, and on-the-job training at sea, or in other shore billets that train naval medical officers. That does not preclude anyone from changing or having a multispecialty rating within the Navy Medical Corps. I see no conflict. Do you agree with that, Admiral Custis?

VADM Custis: I hope all the authorities in academia agree with you, and with us as we go in this direction. There shouldn't be any conflict, in my opinion.

"Family Practice at a Graduate Training Center as Viewed by an Orthopedic Surgeon"

CAPT D. Wilson, MC, USN
Chief, Orthopedic Surgery
NRMC Oakland, California

While I agree that we need a plurality of medical plans or health care plans—a pluralistic approach—I do not believe that we should continue as a line item in the budget of the Chief of Naval Operations. I think we're entitled to a separate maintenance agreement, at least.

In 1970, when I first stood here before a much smaller group, I asked that we be given our own prepaid health care plan, funded directly by Congress. I believed then, as I do now, that the main job of both the Chief of Naval Operations and the Chief of Bureau of Naval Personnel is inconsistent with our needs. We have a different personnel management problem; we have a different funding problem. Our job doesn't go up and down like an escalator; it constantly increases, and it seems logical to me that we should have funding on which we can depend and plan for at least five years.

As a background to family practice in graduate training hospitals, I would like to say that, as in the past, the consensus of the orthopedic group is consistent with policies still prevalent within the Navy Medical Department: that family practice should not be part of graduate training hospitals. But after listening to the speakers here, and having thought about this myself, I think I finally convinced my colleagues that we *do* need family practice in graduate training hospitals.

The American College of Orthopedic Surgeons and the American Board of Orthopedic Surgeons recently published a policy stating that they will not approve new training programs in orthope-

dics, and that they will eliminate marginal programs to bring the production of orthopedists in line with the need. While we have no statistics on the need for orthopedists in the Navy, we believe that about one orthopedist per 70,000 population would be the upper limit, and that the lower limit would be one to 20,000. That is the saturation point, and we will reach it by 1980.

I have no way of knowing whether these statistics and recommendations are based on things as they are, whether we're trying to provide specialty medical care to patients who have more than one problem and therefore require more than one physician or whether they're based on the idea that family practice or some other form of primary health care will be viable.

In my estimation, we could take a hard look, as Admiral Rupnik is taking a hard look, at our needs, projecting them over a ten-year period with the view towards horizontal cuts in specialty training in our graduate training hospitals, and replacing them with graduate trainees in primary care or family practice. We need that base. It's a constant hassle in my hospital to provide our beneficiaries with the best possible medical care at the least cost.

DISCUSSION

VADM Custis: We would all do well to read last year's Medical Planning and Reorganization Act, Public Law 93-641, because it is clearly the structure of tomorrow's health care delivery system. Also, read HR-1, the Ullman Bill, because it probably represents the consensus to date of what Congress has proposed for national health insurance. It is the financing plan, and more, too. It obviously has gone a long way in supplementing the concepts in Public Law 93-641.

Another thing: Everyone is thinking—we, not the least among them—that when Congress passes that ultimate legislation it will be time to take a look at the several Federal medical services. You know about the almost-demise of the Public Health Service. The Public Health Service is still in a lot of trouble in an all-volunteer environment. It is very attractive for anyone with an affection for all the Public Health Service stood for in its prestigious day that it be rebuilt, and be strong enough not to be killed again.

When all this finally comes to a showdown there is plenty of room for differences of opinion depending on one's perspective. I don't deny that

there are a lot of advantages in greater unification. I can see, for example, that only with cooperative unification can there be an effective USUHS Medical School. And I think you'll agree that if any one of you had no military background and were the country's most prestigious hospital health care delivery consultant, and you were called in to take a look at military medicine, you would very likely urge a greater degree of unification. But here's the hitch: Does the medical service belong to the service chief—in our case, the CNO—or not?

Now it's true that we compete year after year with the line—pilots for doctors, ships for intensive care units. I think the power base for representing the interests of military medicine will be the Joint Chiefs of Staff. Without the support of the Joint Chiefs, events could control us, rather than our controlling events.

There are two concepts coming out of the upcoming OMB study that represent victories, I believe. Even OSD recently recognized these concepts in a written statement. They represent two things that we've hammered away at at every opportunity, and I think we've sold. One is that with national health legislation and its impact we don't know what might happen to the Veterans Administration. The other is that as long as the country has a defense force, there must be quality medical support for that force. The medical support must be in uniform, and must be capable of immediate contingency response.

Then there was the MEDCON (medical contingency) study, on which CAPT J.W. Johnson has done such a tremendous job for us. The MEDCON study is well respected. It's an excellent piece of work. The idea is to determine the proper size of the three medical departments, based on contingency needs and using the NATO scenario, with due consideration for backup by a totally integrated reserve component. Another goal is to provide the right patient mix in peacetime to assure high-quality professionalism, career incentives for volunteers, good medical graduate education, and opportunity for physicians to practice their specialty throughout their career in the system, should they choose. And that need for patient mix is recognized in the OMB study, and also by OSD.

There is a lot of constructive criticism in the OMB study that I think can help us. One big thing that will probably come out of it is the opportunity to acquire the computer hardware we need for an

up-to-date management information system. Another important area of the OMB study is that portion that addresses cost effectiveness, comparing the military with the civilian sector. For 18 months OMB gathered a tremendous amount of raw data; this data was gathered during late 1973 and throughout 1974, the time when the Cost of Living Council had a lid on the private health care sector. Since that lid came off at the beginning of 1975, hospital costs have inflated 17% and professional fees have inflated 15%. But we're talking about a time when the lid was on. And during that time the OMB study showed that if every dependent and every retired patient in the hospitals of the three services had been cared for under CHAMPUS instead of in the military system, the care would have cost \$790 million more than it did.

Participant: Will it continue to be BUMED policy that family practice will not be included in graduate training hospitals?

VADM Custis: I don't know. We've been operating now for two or three years on an ad hoc basis. Right now, in my opinion, we are on the right course with family practice. As we get more experience, we may change. For example, I believe that the Board of Regents at the USUHS are very much interested in family practice in the undergraduate years. So we may someday be responding to a concept that will grow out of the University.

"Extended Hours Utilization of Surgical Suites and the Impact of Extended Hours Utilization on Hospital Corps, Nursing, Anesthesia, and Other Support Facilities"

CAPT Claude Atkins, MC, USN
Chief of Surgery
NRMC San Diego, California

The Surgical Committee believes that the single most important problem facing all the surgical specialties—and let me emphasize *all* surgical specialties—today is that of inadequate support personnel, primarily nurses and corpsmen needed in the surgical procedures being performed in the operating suites of our graduate training hospitals.

How'd we get ourselves into this problem? I believe that the increased demand for support personnel can be largely traced to the develop-

"Military health care systems are harbingers of tomorrow's system for the civilian sector."



VADM D.L. Custis

"There should be no separation between quality care and quality teaching."



CAPT J.E. Schanberger

"Navy medicine is an integral component of the Navy Department."



CAPT M. Valaske

ment of programs and procedures (particularly open heart surgery, peripheral vascular surgery, extended oncologic surgery, neurosurgery, and joint replacement operations) which by their very nature require increased time and personnel. I also fondly believe that some of the increase in our workload is the result of recognition of the excellence of our programs and our performance.

Our workload cannot be managed in a standard eight-hour operating day with our present personnel resources; these resources are well below the number available in the civilian community, and well below the standards set by the national nursing organizations. The operating staff is consistently forced to work overtime in less than ideal circumstances. The effect on productivity, morale, and retention should be obvious. From the standpoint of the patient, case cancellations and delays are frequent.

We propose the establishment of an overlapping shift system for operating room nurses and corpsmen. If properly constructed, this system would provide improved coverage during peak hours, and allow us to extend the hours of the operating day.

Now, I realize this all sounds very simple. And I'm certain that you will see what the problem is. Such a system will require significant increases in the numbers of support personnel, primarily in corpsmen and nurses, and to some extent will affect other areas, particularly anesthesia. But it's possible to lessen the impact of any change by

hiring civilians for the tasks which can be done by minimally trained nonprofessionals. This would include the patient-pushers, the instrument cleaners, the room swabbers, and so on.

Can this be accomplished under the constraints of authorized billets and civilian ceiling points? I assure you, if we had the answer to that, I wouldn't be bringing it up here. There are some alternatives, but I admit that we find them exceptionally unattractive. For if we continue to struggle with the problem, as we are now doing, a little further down the road we're going to wonder why all our good people—medical and nonmedical—have become disillusioned and are leaving us.

We can make vertical cuts. We can reduce services. We can insist on CHAMPUS referral of everyone who is eligible. (After all the time and effort we've expended in the recent years bringing CHAMPUS eligibles back into our programs, that's progress in reverse.) But some of us have observed first-hand what happens to surgical training programs when CHAMPUS referral is encouraged.

Another alternative, and this is just one I've heard kicked around, is to take certain categories of procedures entirely out of naval hospitals, sending these patients to neighboring, somewhat affiliated institutions with better staffed operating facilities. Personally, I think this system won't work. It is at least as undesirable as the other alternatives.

"The most important problem facing all surgical specialties today is inadequate support personnel."



CAPT C. Atkins

"G-1 training should reflect increased primary care capability."



CAPT J. Davis

"Operational assignments are preferable prior to residency training, rather than after."



CAPT R. Cantrell

The Navy has an active group of professionals. We have the experience, the expertise, and the enthusiasm. I think our training programs and levels of care we provide are unsurpassed by anyone. To maintain all this we're going to have to have some help.

DISCUSSION

VADM Custis: Well, there was a lot of wisdom in your words, and I don't have any pat answers. It points up again that what we're talking about again is budget—obtaining resources—and we are in a new ball game. We can no longer do anything by the seat of our pants. We have to justify our needs on a cold, analytical, anticipatory basis.

The system analysts have inherited the Government. Emotions and intuition count for nothing anymore. We are going to have to justify—to prove—what resources are needed to support our programs.

When we talk about the support required for tertiary care, we must also know, on an analytic basis, what is required for secondary and primary care. You know, the leading factor in staffing and resources is the physician. If you overstaff a department or a hospital, there immediately follows overstaffing of all the personnel who support the physician.

I honestly think—and again I can't present it on an analytical basis, it's intuitive as much as any-

thing—that 3.5 % of the authorized strength of the Navy today, that being the manner in which our corpsmen level is determined, is probably more than adequate if only our corpsmen were properly distributed. Do you agree with that, Ed?

RADM Rupnik: I do agree. But there's another provision: duties that do not require corpsmen must be assigned to other types of enlisted personnel, rather than to corpsmen. I think that's where we make our error.

VADM Custis: Another thing: we will be redistributing our tertiary care capabilities in regions. Satellite hospitals will not be permitted to drain resources such as personnel, intensive care, coronary care, and so forth, when 30 miles away there is a medical center much better able to handle tertiary care.

And finally, CHAMPUS. When you all get a chance to read the OMB study, you'll find that the program that took the worst beating is CHAMPUS. OASD (H&E) now candidly states that CHAMPUS care is very expensive, that CHAMPUS needs a lot of tightening up. I don't think we'll hear much more about cutting back on military resources and sending patients to CHAMPUS. The pressure is going to be just the opposite. For example, the House Appropriations Committee last week added an amendment to the FY76 Appropriations Bill that extends the trial program going on in the three services, that all retired personnel and dependents within a 50-mile radius of

"We do need family practice in graduate training hospitals."



CAPT D. Wilson

"Nurse practitioners are an expansion of the traditional nursing roles."



RADM M. Conder

"Without operational commitments there is little justification for a pluralistic system of Federal health services."



CAPT J.W. Cox

a military medical facility must have a nonavailability statement in order to use CHAMPUS. There's an amendment now in the Appropriations Bill extending that across the country wherever there is a military hospital. Everyone within a 50-mile radius must have a nonavailability statement.

We can't possibly handle this workload unless Congress gives us the resources to do so. Simply because we have empty beds doesn't mean that we can assume this extra patient load. A bed is nothing more than a bed. Bed count has no effect on the personnel and the resources needed to take care of a patient once he is in that bed.

Maybe I'm just a born optimist. I don't know. But I think the way everything is going, we're going to have a better crack at solving the problems you've identified. I think there's a brighter day coming. I really do.

"Specialty and Subspecialty Training and Utilization of Internists in Navy Medicine"

CAPT John W. Davis, MC, USN
Chief of Medicine
NRMC Oakland, California

A little over one year ago, the chairman of the Department of Medicine at Dartmouth Medical School presented a paper entitled, "Primary

Health Care: The Crisis of Expectations," which clearly stated the factors involved in the dilemma affecting the health profession today. From what we have heard this week, and from the diversity of opinion during our workshop sessions, it is abundantly clear that we in the Navy Medical Corps are deeply involved in this crisis.

It seems to me that, from the point of view of the internists and the medical subspecialties, I may be speaking for some of the group rarely, some of the group much of the time, and none of the group, unfortunately, more often than I would like. But perhaps there are a few points upon which we have a consensus of opinion and can base useful dialogue.

First, considering consumer expectations: I think that the individual beneficiary is expecting continuity, comprehensiveness, and rapport. And as a group, our sophisticated public also expects excellence of medical care and cost effectiveness.

Dr. Bloom has presented a model of ambulatory health care delivery at the Naval Regional Medical Center in San Diego [*U.S. Navy Medicine*, 67(1):13, January 1976]. I would suggest that there are dangers in the system that may promote less than optimal medical care and increased cost and resource utilization, in addition to the loss of individual expectations.

The Naval Regional Medical Center in Portsmouth, Virginia, has, I believe, a similar system, but with a somewhat different emphasis which is

less prone to these hazards. But this system may not be feasible in terms of available resources; that is, it may require an increased number of general internists in teaching hospitals.

An important factor in the development of the above systems, and any others that are proposed, is another aspect of consumer expectations: our employer. We heard early this week about resources, the limitations thereof, and the expectations of our Navy line colleagues. I believe we're going to hear more about that shortly.

The other part of the crisis derives from the providers of health care, and I'll comment specifically only about internists and medical subspecialties. We're concerned about the performance of our duties as Navy internists and subspecialists in relation to the medical profession and to our public, and also to our individual professional satisfaction and personal gratification.

With this as background, I would like first to consider the hazards I see in the San Diego system, and then briefly to consider corrective factors and alternatives. Finally, I wish to offer a plan for the training and utilization of internists and medical subspecialists, which is perhaps flexible enough to meet the demands of our expectations.

As I understand it, the NAMIC (Naval Acute Minor Illness Clinic) system has been developed to allow an internist or resident medical subspecialist to supervise corpsmen with limited training, who take care of minor acute medical emergencies and do much of the screening. The hazard I see is in the lack of quality control. This should be included in the supervisory role, but in fact is probably fragmented to some extent by the need to oversee multiple patient input at the corpsman level.

This is not a physician extender model. I haven't decided what to call it. The corpsman seems to be a number of tails wagging the dog, who is the physician. I see little job satisfaction, minimal teaching, and much discouragement in this role, with the accumulation of unnecessary consultations, laboratory studies, and X-rays, and waste of the subspecialist's time when a patient is inappropriately referred for unrelated problems—secondary triage, as it were.

The alternatives I would suggest all have one thing in common: use of paramedical personnel as true extenders. The most sophisticated, well-trained individuals—whether physician's assistant, nurse practitioner, or hospital corpsman—

must be available to screen patients and carry out medical or paramedical functions. This system would permit family practitioners, operational physicians, and general surgeons to provide ambulatory or primary care without sacrificing the major expectations of the consumer.

I would like to present our group's points of consensus:

1) If primary care is to be a major responsibility of the internist, more billets and bodies are needed. The training program should not be decreased. Consolidation of training should not be encouraged, for varied expertise is desirable. Loss of the program in Philadelphia is viewed with reservation.

2) Subspecialty training programs must be maintained to keep our internal medicine training programs viable. Increased resource effectiveness is assured, since medical subspecialists can provide primary patient care, as needed.

3) The G-1 level of training should be broader, reflecting increased primary care capability and resourceful elimination of the categorical or straight intern. This trend is in keeping with the current emphasis of the American Board of Internal Medicine on meaningful patient responsibility, rather than direct patient care.

4) Operational duty after completion of G-1 training would give many trainees an opportunity to practice primary patient care. This service could be made more significant through interaction with regional medical personnel, when available.

DISCUSSION

VADM Custis: Sometimes I get the feeling that there's really not much new to be said about primary care. I think it's all been said. I think all of us down deep in our hearts know exactly what we've got to do about it. We haven't done enough. For my part, I think there's ample room for pluralism in attacking this problem.

I'm reminded again that what we really need is an analytic and anticipatory way to determine our needs: How many physicians in *this* specialty? How many in *that* specialty?

But I want to assure you that in no way do I mean to underestimate the importance of maintaining high-quality subspecialty programs. It's not a question of doing less in that area, it's a question of doing more in the area of training generalists: generalists who are in family practice,

generalists who are in internal medicine, generalists who are in pediatrics. In fact, I hope that all specialists will retain some ability to function as a generalist when the need arises.

Regarding physician's assistants, I don't suppose that there is anybody who has a higher regard for the PA Program and its promise than I do. The PA Program in the military ran into trouble recently with OSD because it has a poor reputation in the private sector. There's a lot of concern about what the PA is going to grow into, and whether or not he might become a medical monstrosity. In the military environment, certainly, we are able to prevent this. The PA has a very important role to play in military medicine, and we do not intend to restrict his functions to hospital and dispensary outpatient clinics. But until we have enough strength in our PA resource, that is where the highest priority has been placed.

We are now going to see where the PA can function with the fleet. I, for one, hope that he will never displace or be confused with the independent duty corpsman. The PA, in my opinion, must always be under the supervision of a physician. The independent duty corpsman and the physician's assistant are two entirely different talents.

I think it's unfortunate that there is a push on their part, and on the part of their advocates—before they've really even had a chance to find their niche—to achieve commissioned status, to challenge the Nurse Corps. This can only be destructive. I can't conceive of a special category of therapists working in an environment and aspiring to commissioned rank and unsupervised management of patients. I think we'd all better think hard about this subject from a very practical standpoint. The PAs' aspiration for commissioned status is impossible right now, literally impossible. They can only be more and more frustrated. The Air Force doesn't even have a warrant program. OSD and Congress have expressed themselves: they aren't about to provide commissions for the PA Program. Maybe somewhere down the line, if a big enough lobby is built, this whole thing could be turned around. But I think it is fraught with hazards.

I submit that the PA has an excellent career opportunity in the warrant structure, and I think that if he really wants to avail himself of all that opportunity, there is plenty to challenge him. It is not a dead end. He can go to medical school. If he aspires to medical administration, he can be commissioned in the Medical Service Corps.

“Nursing Support Requirements for Intensive Care Units”

**CAPT John E. Schanberger, MC, USN
Chief of Pediatrics
NRMC San Diego, California**

I stand before you as an advocate for those who can't on their own generate the squeaky wheel that gets the most grease: namely, the 1,000-gram infant or even the 3,500-gram infant who needs special care, perhaps after surgery. I'm speaking about our intensive care units, and I certainly do include our coronary care, medical intensive care, surgical intensive care and our neo-natal units.

Since the theme of SAC-7 happens to be “Graduate Medical Education,” please let me emphasize that in our view there can be and should be no separation between quality care and quality teaching. This applies most certainly in our intensive care units. We need renewed emphasis on identifying Nurse Corps personnel and hospital corpsmen who have the skill and maturity to serve in these units. We need to identify these people, recruit them in adequate numbers, train them, motivate them, and assign them to intensive care units for maximum-length tours. The identification of the nurse, whether civilian or military, is the first step.

The chief nurse in our institutions must ensure that our nurses receive the training they need to function at their maximum potential. Also essential is in-service instruction of intensive care unit corpsmen and technicians. At San Diego we have a fine coronary care training program conducted by the In-service Nursing Division. We have also been impressed by the determination shown during the past year by the chief nurse, who has been sending qualified Navy Nurse Corps officers, one or two at a time, to Stanford University for a month of training in the postoperative management of cardiac surgery patients, including the smallest infants. There is also an exchange of nurses between the intensive care nursery at San Diego and the outstanding intensive care nursery conducted at the University of California at San Diego. Our Navy nurses go to UCS for from one to three months, and their top nurses come to our nursery for a comparable period of time.

In this area of intensive care we need the support not only of an interested and committed chief nurse, but also additional command support, primarily from the military personnel officer. I will

not propose a minimum length of tour in intensive care. It depends on the continued motivation and ability of the nurses and corpsmen involved. The stress of service in an intensive care unit, day after day, week after week, may eventually wear down even the best. The head nurse of the nursery or the charge nurse of the surgical ICU may have to say to even her best staff members, "Now I want you to have a different assignment."

CHAMPUS has been a real safety valve for us, certainly in our neo-natal intensive care unit. Sometimes we receive a call from another military command asking if we can receive another infant. If our nursing service is already at full capability, or even beyond full capability, it is discouraging to tell the referral hospital, "I'm sorry, but the infant will have to go to a civilian center." I'm concerned about more than the enormous expense for each of those infants. I'm concerned about the tearful parents who have to admit that they literally cannot meet the prompt demand for \$25.

DISCUSSION

VADM Custis: Well, I compliment Jack on his very pertinent remarks, but I would prefer that RADM Conder respond. And I encourage her not to limit herself to a response to these observations. I'm sure she has some other things she'd like to say.

RADM Maxine Conder (NC): Well, I agree with almost everything that's been said today concerning nurses' needs, their roles, and so forth. I was a chief nurse until about three months ago, and I can assure you that chief nurses are getting a lot of grey hair, and are praying a lot, and are doing everything they can to support every service in the hospital.

I have been interested to find out that in many of our hospitals up to 40% of the Nurse Corps officers are assigned to the clinical care areas. I'm being constantly asked to put more nurses into the Nurse Anesthetist Program, the Pediatric Nurse Practitioner Program, and the Family Nurse Practitioner Program. You name it, I'm being asked for it.

I also worry about the condition of those patients. I see no increase in the number of nurses, and I worry very, very much about the critical care patients, and the other patients as well. I think you are going to have to help us in perhaps setting limits. We are driving some good nurses out of the

service because of overwork and unrealistic working conditions. We are in the process of identifying billet requirements and Nurse Corps talent, and we hope that we will more realistically make our assignments meet our needs.

I would also like to speak about the family nurse practitioner role. I've become very much aware of the confusion and the hostility between some supporters of the physician's assistant and supporters of the family nurse practitioner, and I'm very sorry to see this. I think these people believe that in order to support their program, they have to tear down the other. But these are two separate programs, totally different.

The family nurse practitioner practices nursing. The traditional nursing role is no longer the one that I remember from some years ago. It is changing. It's changing in the civilian community, as well as in the military, and we're not going to stop it. We may not utilize it, but we're not going to stop it. The nurse practitioners are an *expansion* of the traditional nursing roles. The physician's assistants are an *extension* of the physician role. I feel there's a need for both. I see no need for conflict, although I must admit my blood pressure went up quite high the day someone asked me if I would be willing to send the nurse practitioners to Sheppard Air Force Base along with the physician's assistant. My answer was not "No," it was "Hell, no."

SUMMATION

VADM Custis: When you talk about the future of military medicine, I think you've got to anticipate what's in store for the civilian sector. I sit on the Board of Trustees of the American Hospital Association, in the House of Delegates of the American Medical Association, and on the Board of Governors in the American College of Surgeons, so I have a fascinating opportunity to hear organized medicine's troubles with problems comparable to ours. I think there is a clear consensus that it is no longer a question of whether or not there will be a National Health Insurance Program, it's a question of how the program will be designed. Just read Public Law 93-641, and you'll see how. Ours is going to be the first regulated profession the country has ever seen. Regulated as banks are regulated, as transportation is regulated, as communications are regulated.

There are several reasons for this development. One is the concept that access to health care is

everyone's Constitutional right, regardless of ability to pay. No one contests that idea any more that I can see.

Second, there's the problem of costs. Almost 10% of the gross national product in the United States is now going for health care. Within the last 15 to 20 years, the total financial commitment to health care in the United States rose from \$12 billion to \$104 billion, and it's expected to go to \$110 billion this year.

Another reason is that although we have had a tremendous health and medical care program in the United States, there are undeniable, scandalous inequities, inefficiencies, and so forth. You only have to read the American College of Surgeon's study to see how candidly the profession is admitting this.

And finally, I think that it has become a popular conception—but one that is hard to deny—that medical care in the United States is a monopoly in the hands of the physician. And monopolies have always been tempting targets for anti-trust legislation.

When you read Public Law 93-641 you can see that the Army, and the Navy, and the Air Force health care systems are harbingers of tomorrow's health care system for the civilian sector. There will be, in the Ullman Bill, and there already is in P.L. 93-641, a top dog in terms of setting policy and regulations based on the law. That's the Assistant Secretary of Health in the civilian sector; it's the Secretary of Defense in our case. Under the Ullman Bill, this top person would have full Cabinet status as Secretary of Health. The next in line among civilians is the governor of the state. In our case, the next in line is the CNO, who appoints and delegates responsibility to the Surgeon General. The governors appoint a Board of Health Commissioners. The Surgeon General collects a headquarters staff, while the health commissioners in the state maintain health service agencies, about 200 of them in the 50 states. These agencies have much the same responsibility as we assign to our regional medical centers. Then add the Ullman Bill and you've got the health care corporation concept. The health care corporation is the hospital, the provider.

The health service agency has all manner of power. They control resources, decide whether a facility will close or whether a facility can be built; they can build a judicial system for quality control, for research management. The Ullman Bill even insists that within five years of implementation

health care corporations must provide, as an option, anticipatory per capita insurance programs; and that the registrants of the health care corporations—the consumers—are given a significant income tax break. So within five years it's going to be a very expensive proposition for a U.S. citizen to seek private care on a fee-for-service basis.

Now ask yourself, "Under that kind of regulation, where would I rather practice medicine?" That's why I think military medicine has a good future.

CAPT J.W. Cox: I should like to thank most heartily the Surgeon General and the other flag officers who have given such intense attention and participation. Thanks also to the planners and executors of SAC 7—CAPT Steve Barchet, CAPT Bill McDermott, and their staff. I think that they certainly deserve our compliments. Also, I would like to make special notice of the productive participation of the Air Force and Army representatives at our deliberations on common problems. Thanks to the committee chairman, and the participants. But most particularly, our thanks to RADM Laning, RADM Williams, and the people in the operational medicine codes who are demonstrating the relationship between our graduate medical education programs and our service to the fleet. This is why we exist as a separate health services system. Without the operational commitments, without the operational responsibilities, there would be little justification for a pluralistic system of Federal health services.

The theme that we have followed here is individual and institution proficiency, evaluation, and accountability. We have moved into an era of "truth in training." Real and perceived needs must be well justified, and analyzed in terms of potential outcome relative to excellence, efficiency, economy, and equity.

Proposals must consider their impact upon all other aspects of the system. Say a new program at Hospital X is endorsed by the commanding officer. What other services there are affected? What about operating room space and personnel? the laboratory? the Radiology Service?

Finally, when the options are clear, priorities determined, and decisions made, we must be accountable, and indicate that we have trained to officially established and authorized requirements. We are not expanding, but rather reshuffling our assets to get our jobs done in the order of their priority.

Scholars' Scuttlebutt

Next Stop: Newport!

We call it "Navy medical education," but the "Navy" part sometimes gets the shaft.

On 1 June 1976, we'll launch an attempt to do something about that. That's when the first group of 100 Navy-sponsored medical students will arrive at Newport, Rhode Island, to participate in a six-week officer indoctrination course at the Naval Education and Training Command. They'll be pioneers: until now, there has been no unified Navy orientation program for medical students, even though the six-week Newport course is routinely given to all newcomers in the Nurse Corps, Dental Corps, and Judge Advocate General's Corps.

All Armed Forces Health Professions Scholarship (AFHPS) students will get this training sometime during their medical school career. The objective: to instill in each newly commissioned officer a strong sense of military achievement, devotion to duty, moral integrity, and responsible managerial leadership.

Classes will be held throughout the year, with the first two set for 1 June-9 July, and 19 July-27 August. Students will be chosen for a class on the basis of their availability, school plans, and class schedules.

What can you expect during your Newport layover? The course includes a five-week "common core curriculum" of basic military orientation identical to that now given to other staff corps officers. Another week of special medical topics will be worked into the core curriculum.

Core topics you'll take include leadership, naval traditions and courtesies, military law, communication techniques, and management psychology. You'll get out of the classroom and on board ship to learn navigation and use of nautical instruments (that goes for the women, too). And you'll learn to navigate more than just a ship: to protect its investment in you, the school insists you master defensive driving.

Medical topics include Navy Medi-

cal Department history; promotion, specialization, and education opportunities; and naval hospital organization. You'll learn about the different Medical Department corps, and the medical officer's role aboard ship, in shore-based medical treatment facilities, and in naval aviation and undersea medicine.

At the end of the course, you'll be evaluated. Your performance will be a factor in future selection for training programs and assignments.

During the six weeks, which count as an active-duty period, all students (married or single, male and female) will live in the Bachelor Officers' Quarters. You'll have generous free time to explore the sights and sounds of Newport. One exception: for the



In the classroom



The Navy part of Navy medicine



Newport BOQ: For 6 weeks it's home

first week, everyone must be in the BOQ by 2200.

You'll purchase meal tickets to use in the consolidated mess; you can also eat in the Commissioned Officers' Mess (open) and the Commissioned Officers' Mess (closed).

You can bring your car, and if you have a family you can bring them at your own expense. But we don't advise it; rooms are scarce and expensive in Newport because of the Bicentennial tourist rush. You will be responsible for all costs incurred.

You'll have no shortage of recreation and entertainment—Newport is one of the smallest communities in Rhode Island, but it boasts all of the attractions you'd expect to find in a much larger vacation area: excellent restaurants, salt water beaches, fishing and boating, golf courses, tennis courts, yacht racing, and nationally-known historic sites.

And of course, all the resources of a large naval base will be a few steps away—movies on base, a swimming pool, athletic fields, Navy exchange retail stores (you'll have PX privileges), a consolidated package store, and a commissary. There's a recreation center near the Main Navy Exchange where you'll find bowling lanes, billiard tables, a cafeteria and lounge. If you get the itch to tinker, you can head for the craft shop to use woodworking machinery, hand tools, photographic equipment, and electronics gadgetry.

Medical and dental care will be provided as needed during the six weeks. The Naval Regional Medical Center offers a full range of outpatient and inpatient medical services.

You'll get details and regulations in the mail well before you leave for Newport. Meanwhile, here's the class schedule:

CLASS	DATES	
7T001	19 Jul 1976	— 27 Aug 1976
7T002	30 Aug 1976	— 8 Oct 1976
77001	4 Oct 1976	— 12 Nov 1976
77002	8 Nov 1976	— 17 Dec 1976
77003	3 Jan 1977	— 11 Feb 1977
77004	14 Feb 1977	— 25 Mar 1977
77005	28 Mar 1977	— 6 May 1977
77006	23 May 1977	— 1 Jul 1977
77007	11 Jul 1977	— 19 Aug 1977
77008	22 Aug 1977	— 30 Sep 1977

BUMED SITREP

CHILD ADVOCACY PROGRAM . . . BUMED Instruction 6320.53 has been signed, establishing the Navy's Child Advocacy Program. The program is designed to protect children who are abused, neglected, or abandoned. Details next month in *U.S. Navy Medicine*.

INTRODUCING NOLA . . . Establishment of Naval Regional Medical Center New Orleans, Louisiana, was announced last month by Secretary of the Navy J. William Middendorf II. The new 250-bed medical center will be in a developmental status until December 1976, when it will become fully operational. It will eventually employ approximately 350 military personnel and 200 civilians. Total acquisition and construction appropriations are estimated at \$18,766,000.

EQUAL OPPORTUNITY KNOCKS . . . BUMED is looking for petty officer E-6's and above who want a challenging job as Equal Opportunity Program specialists. For more information call BUMED Code 008 (Autovon 294-4081) or Code 313 (Autovon 294-4719).

HM IDENTIFICATION . . . When dealing with patients, all hospital corpsmen with a valid Navy Enlisted Classification (NEC) should be identified by their technical skills: "HM2 Jones, X-ray Technician." Hospital corpsmen who do not have a specialty NEC but who work in primary care or specialty clinics shall be identified by the single title of "clinical assistant." This will help to eliminate a confusing glut of titles, such as "physician's aid," "physician's screener," "physician extender," etc. The title "Physician's Assistant" or PA is reserved for active duty personnel who have completed a formal PA education and training program and who have subsequently been appointed physician's assistant warrant officer (WO-1).

NFPA PAMPHLETS AVAILABLE . . . In November 1975, the National Fire Protection Association (NFPA) approved a Recommended Practice on the safe use of high-frequency electricity in health care facilities. This Recommended Practice was published

in the pamphlet "Electrosurgery" (NFPA 76CM). Although not enforceable as a Standard, this document contains valuable information for individuals concerned with use of the Bovie cautery. It describes the various types of high-frequency equipment and associated hazards. Techniques are presented for eliminating or minimizing these hazards. The appendix contains applicable sections of other codes, detailed review of the interaction of electricity and tissue, procedures for use and maintenance of equipment, and methods to test the equipment's power output.

For further information about this and other pamphlets write: NFPA, 470 Atlantic Avenue, Boston, Massachusetts 02210.

SUDDENLY LAST OCTOBER . . . We missed announcing it in BUMED SITREP, but just in case you missed it, too, here's a replay: Naval Hospitals Memphis, Orlando, and Corpus Christi became naval regional medical centers effective 1 October 1975.

NEW CO FOR DATA SERVICES . . . New CO of the Naval Medical Data Services Center, Bethesda, Maryland, is LCDR John R. Knight (MSC). He relieves CDR Bruce J. Dietz (MSC), who has retired.

WASTE DISPOSAL SYSTEMS

AFLOAT . . . BUMED is working with the Naval Sea Systems Command (NAVSEA) and the Naval Ship Engineering Center (NAVSEC) to develop suitable trash compactors aboard surface ships. Onsite surveys of test compactor systems have been conducted aboard the USS *America* (CVA-66) and the USS *Inchon* (LPH-12). Technical assistance is also being provided to NAVSEA to develop a trash disposal system for the Trident Program.

Another ongoing cooperative project with NAVSEC is the modification and development of garbage grinders that can be used aboard ship with salt water instead of fresh water. Testing and evaluation is currently under way aboard the USS *Fulton* (AS-11), USS *Dixon* (AS-37), and USS *Dace* (SSN-607).

Reserves

The Best Thing That Could've Happened

Drilling for the men of the Naval Medical Reserve in LaCrosse, Wisconsin (officially dubbed the Naval Regional Medical Center 4616), means weekends spent working at LaCrosse Lutheran Hospital.

You won't find them marching down the halls or entertaining patients with "Anchors Aweigh." Instead, a couple of the men will be working in the emergency treatment center, assisting and observing, depending on their training. Others may be running tests in the laboratory. Still others will be working in wards or other areas of the hospital.

Close supervision means that the hospital's high standard of patient care is maintained, according to the unit's commanding officer, CAPT John B. Weeth (MC). Dr. Weeth says this is possible because several of the unit's officers and enlisted men also spend their work week at the hospital and Gundersen Clinic.

Dr. Weeth is a physician at the hospital and clinic, specializing in internal medicine. So is the unit's executive officer, Dr. Martin J. Smith, an internist. Others included in the unit's complement of officers and on the hospital/clinic staff as well are Dr. Gordon L. Johnson, an internist, Dr.



When this young patient sprained his ankle, HM3 David Allain was on duty in the emergency ward of Luther Hospital, LaCrosse, Wisconsin.

Francis Tautin, a prosthodontist, and LT Janice Langston, a staff nurse. HM1 Dale Nachreiner is on the administrative staff of the hospital.

The unit, formed in August 1974, has six officers and 19 enlisted men, with openings for eight more officers and eight more men.

HM1 Harold Dickey is a foreman with the Hormel Meat Packing Co. during the week. Weekends he's working in the lab; he hopes eventually to be an accredited medical technician. He called the training program offered through the Reserve unit and the use of the facilities at Lutheran Hospital, "a beautiful marriage."

CPO Arlie Hickox, a purchasing agent from Madison who is involved in purchasing for the state university system, calls the LaCrosse program, "A wonderful opportunity for the young people. They're getting practical experience they could never get at a training center."

MCPO Donald Merfeld, a lab technician at the Trane Co. with two years of active duty and 29 years in the Reserves, called it, "Outstanding; the very best thing that could've happened to this kind of a unit."

Another member of the unit, HM2 Gary L. Winningham of Sparta, who is also Monroe County coroner, was selected "Enlisted Naval Reservist of the Year" by the Readiness Command in the Twin Cities.

The only woman in the unit, LT Janice Langston, is married to HM3 Philip Langston.—Pat Moore, *LaCrosse Tribune* staff writer. Reprinted with permission from *LaCrosse Tribune*, 31 July 1975.

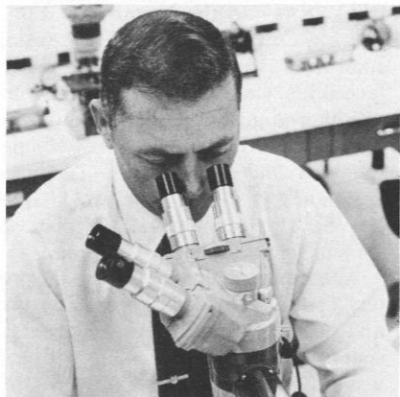
Physicians Aid MCAS Yuma

Nine Naval Reserve physicians helped to lighten the medical workload at Marine Corps Air Station Yuma, Arizona, last year when there were not enough physicians assigned to the air station to care for all patients. Members of the Phoenix Reserve Medical Corps detachment volunteered to help out when they learned of the problem. Under the command of CAPT George H. Mertz, MC, USNR, they worked three-day cycles—Monday through Wednesday, and Wednesday through Friday—to augment the regularly assigned medical staff.

Participating in this effort were Naval Reserve Medical Corps CAPTs George H. Mertz, James A. Austin, Freeman P. Fountain, and Arthur R. Nelson. Also CDRs Clifford E. Ernst, Robert D. Mills, and Lowell G. Yadon; and LCDRs Carl S. Wellish and Charles L. Johnson.

Dental Reserve Symposium

The annual Navy Dental Corps Reserve Symposium was held in conjunction with the Annual Session of the American Dental Association in Chicago on 27 October 1975. This year's program featured a presentation by the Surgeon General of the Navy, VADM D.L. Custis (MC), on "The Role of Outside Influences on the Navy Medical Department." RADM Robert W. Elliott, Jr. (DC), assistant chief for dentistry and chief, Dental Division, discussed the "Status of the U.S. Navy Dental Corps."



HM1 Harold Dickey, Naval Reservist, examines a slide under a microscope during his unit's drill.

Soundings

"Executive Officer": A Title Worth Keeping

CDR T.F. Levandowski, MSC, USN

BUMED Talking Paper #35 announced that the Medical Department Command Selection Board would select officers for assignment as commanding officers, officer-in-charge, directors of administrative services, directors of clinical services, and senior staff officers. But it appears that there will be no more executive officers in the Navy Medical Department. This is most unfortunate. A viable institution is being lost, and with it a ready identification and point of contact with the line. Equally as unfortunate, a valuable Navy link is being taken away from junior medical officers.

The position of executive officer in the Navy carries a special importance. At the Naval Aerospace Medical Institute (NAMI) my own billet title was changed from executive assistant to executive officer some 16 months ago. Since then a new relationship has been developed between this command and the numerous line commands at Pensacola. Whenever the NAMI commanding officer is not aboard, the executive officer serves as a ready point of contact. Previously, it was difficult for a caller to determine where he should address his problem in the commanding officer's absence.

The executive officer may also substitute for the commanding officer at official, social, and civilian functions. I recently appeared before a local judge on behalf of one of our staff members. A former naval officer, the judge was impressed that the executive officer of a naval command was concerned enough to appear. In other words, representation by the executive officer provides a readily recognizable command presence.

My experience as the first executive officer at NAMI has been interesting, challenging, and rewarding. When I reported, I knew that my duties were that of an administrator/manager, but

my overall place in the command was ill defined. Anyone who had been in the Navy for a while knew where I fit in, but newer personnel had difficulty identifying with my position.

Then my billet title was changed to executive officer. Some members of the command immediately identified with the new title and responded accordingly; others adopted a "let's wait and see" attitude, while still others simply refused to recognize that any change had taken place. Time, patience, and a consistent approach to problems helped ease the transition.

Crucial to the success of the executive officer billet was the complete support of the commanding officer. His response was not affected by whether or not he completely concurred with the idea of retaining an executive officer who was junior to many of his department heads, or with allowing the executive officer to succeed to command. His alternatives were clear: either the executive officer would perform capably and be afforded all the rights and responsibilities delineated in Navy regulations, or he would get one who *would*, or the billet title would be changed. There was no doubt that the executive officer was an important member of the team, and that his duties and relationship to other members of the command would be as clearly defined in Navy regulations and by tradition.

The location, structure, organization, and mission of the operationally oriented activity are ideally suited to an executive officer billet. Retaining this title within the Medical Department—at least at selected activities—will help us be more responsive to the Navy's needs.

BUMED RESPONSE

The elimination of the title "executive officer" and its replacement with the title "director of administrative services" applies only to naval regional medical and dental centers and to naval hospitals. There are no plans to make such a change in any other facilities.

The title change was prompted, in part, by the requirement of paragraph 1 of Article 0843, in U.S. Navy Regulations: "... the officer detailed as executive officer shall be the officer eligible to succeed to command and who, when practicable, is next in rank to the commanding officer" According to this regulation, the officer eligible to succeed to command is, without exception, the detailed executive officer. But in the Medical Department all executive officer billets were filled by Medical Service Corps officers; adherence to the regulation would mean that MSC officers would succeed to command at all medical facilities, including major treatment centers. Since this singular approach obviously did not give us the flexibility we need to

manage all our treatment facilities, we sought other alternatives.

The alternative we selected was provided for in paragraph 2 of Article 0843: "... when no officer has been detailed as executive officer . . . by the Chief of Naval Personnel . . . the commanding officer . . . may detail as executive officer the next senior officer in the appropriate staff corps." The elimination of a detailed executive officer billet enables the Medical Corps officer commanding a medical center to appoint another Medical Corps officer to succeed to command in his absence; it also enables the hospital commanding officer—whether Medical Corps or Medical Service Corps—to appoint an officer of his choice to succeed to command in his absence.

Eliminating the executive officer title, therefore, gives the commanding officer the discretionary authority he needs to manage his command. It also supports a continuing effort to reduce administrative billets for medical officers, and increases command opportunities for MSC officers.

Comprehensive Dentistry Program

RADM George D. Selfridge, DC, USN
CAPT Paul P. Hatrel, DC, USN

In the fall of 1973 it was announced that, under the sponsorship of the Dental Division, Bureau of Medicine and Surgery, the National Naval Dental Center, Bethesda, Maryland, would initiate a second-year residency program in comprehensive dentistry. Three officers from the 1973-74 program in general dentistry were chosen to begin this training on 1 August 1974. On 1 May 1974, the first chairman of the Department of Comprehensive Dentistry was named: CAPT Paul Hatrel (DC).

The primary goal of the Comprehensive Dentistry Program is to develop specialists trained in all major disciplines of dentistry practiced in the Navy, including endodontics, operative dentistry, oral diagnosis/medicine, oral surgery (primarily exodontia), periodontics, and prosthodontics. Although their level of competency is less than among officers trained in a single discipline, two-year graduates are skilled clinicians whose knowledge and expertise in these fields, as well as in the fields of occlusion, patient motivation, personnel management, and preventive dentistry, qualify them to render treatment in all but the most complex cases.

The secondary goal of the program is to produce an individual qualified in those areas of dentistry which are concerned with the most current philosophies and practices relating to oral health care delivery systems. This includes familiarity with the use of auxiliary personnel and multiple dental operatories. The dental officer will also learn something about in-house hospital dentistry (administration and treatment), pedodontic principles (for consultation purposes), and managing minor tooth movement in adults.

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CAPT Hatrel is chairman, Comprehensive Dentistry Department, National Naval Dental Center.

It is anticipated that graduates will be assigned a special designator number, as are board-qualified individuals in dental specialties recognized by the American Dental Association. Graduates should be able to stand the challenge of any future "board" examination in general or comprehensive dentistry, and be further recognized as "board certified" at that time.

In accord with their rank, graduates will be assigned to positions of greater professional, clinical, and managerial responsibility within the field of comprehensive dentistry. They may serve in a medium-sized dental facility within a regionalized complex, aboard ship, in a teaching facility, or in small, isolated areas where the skills and knowledge of a highly trained comprehensive dentist are vital.

At the National Naval Dental Center, first-year residents are oriented toward furthering their knowledge of dentistry and related subjects. Courses include clinical dental pharmacology, clinical psychology, dental materials, microbiology/immunology, naval administrative management, oral pathology, research methodology, review of biochemistry, review of physiology, and topographic anatomy, head and neck. Didactic and clinical aspects of various dental disciplines are covered. In addition, first-year residents must complete a research project, with written report and oral presentation.

The second-year residency complements the first-year program by concentrating on clinical experience. Patients are screened by the chairman of the Comprehensive Dentistry Department in cooperation with staff consultants, and are selected to provide challenges in multidisciplinary treatment, as well as within only one specialty or discipline. Staff consultants from various disciplines serve as proctors during certain clinical hours, at which times residents see patients who require treatment in those disciplines.

Two clinics are available to second-year residents: a six-chair, conventional clinic; and a new, five-chair, modified radial design clinic.

Residents receive instruction in the properties and uses of dental materials, minor tooth movement for adults, four-handed dentistry, and pedodontic principles. Their training also includes monthly clinical treatment planning/case presentation laboratories, literature review seminars, clinical pathological conferences, consultant visits, evaluations, mock "boards," and teaching experience.

Uric Acid: Its Medical Significance

LCDR F.M. Walsh, MC, USNR

Uric acid is formed from the purines adenine and guanine (Figure 1). It is a relatively insoluble substance; the solubility coefficient of both free uric acid and its monosodium salt is 6.5 mg per 100 ml of water (1,2). In most mammals the relatively insoluble uric acid is converted by the enzyme uricase oxidase to the more soluble allantoin. Man, however, lacks such an enzyme, and is therefore occasionally troubled by gout from precipitation of uric acid in the form of its monosodium salt.

Purines are liberated by the degradation of tissue and dietary nucleotides. The purine bases adenine and guanine, linked to the phosphorylated carbohydrate moiety ribose or deoxyribose, form part of the base pairs that make up the structure of RNA or DNA respectively.

Uric acid is synthesized in the normal adult male at a rate of 600 to 700 mg per day (1,2). The miscible pool in a nongouty adult male is approximately 1,200 mg (1,3,4). The size of the miscible pool increases in rough approximation to the rise in the plasma urate pool, especially in a gouty population. Exogenous purines, especially those of dietary origin, contribute from 300 to 600 mg daily to uric acid production (1,3).

URIC ACID EXCRETION

Renal excretion is the primary method by which approximately three quarters of the body's uric acid production is removed from the circulation (4). The remainder of the pool is removed by the gastrointestinal tract, and is degraded by bacterial enzymes.

Uric acid is probably completely filtered at the glomerulus. It is 98% reabsorbed in the proximal tubules (1,4,5). The urate is then secreted in the

distal tubules. This comprises the amount which is noted in the urine. The high degree of filtration of uric acid at the glomerulus implies that there is no urate-binding globulin in the serum, but recent experimental evidence indicates that a small percent of uric acid might be protein bound (4). The kidney has a capacity for increasing the rate of urate excretion with increasing concentrations of uric acid in the serum. As the plasma urate increases, the secretory rate of nephrons increases significantly. This increase, based on substrate availability, continues until a maximum is reached. The transport maximum of the solute is the intrinsic rate-limiting factor of the tubule (4).

In chronic renal disease, the remaining nephrons retain the ability to reabsorb and secrete

Origin of Uric Acid

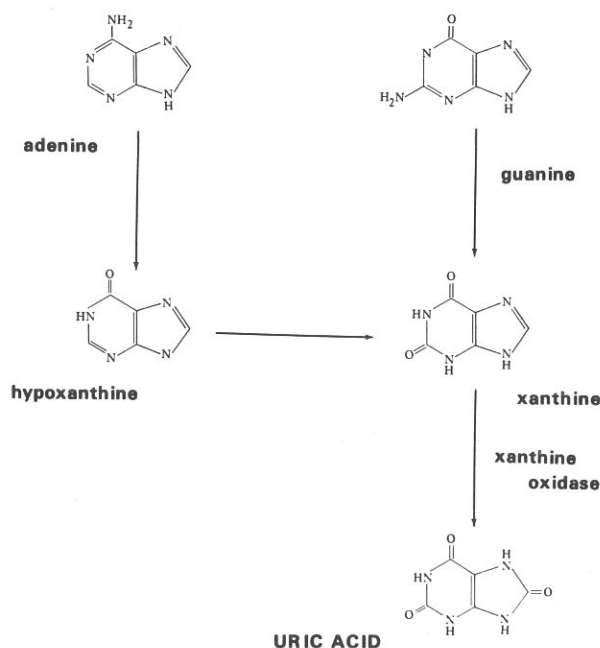


Figure 1. The purine base pairs, adenine and guanine, are split from the sugars (ribose or deoxyribose) and degraded to uric acid.

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urate until end-stage failure ensues. As the glomerular filtration rate decreases below 10 ml per minute, there is marked alteration in urate transport, manifested by both impaired reabsorption and secretion of uric acid by the tubules. Since reabsorption is greater than secretion, the net effect is a marked increase in urate excretion per nephron (4).

Numerous chemicals interfere with the excretion of urate by the tubules (1,3). Among these substances are triglycerides, ketones, and lactate. Uricosuric drugs cause retention of urate in low doses and uricosuria at higher doses, a paradoxical effect caused by inhibition of tubular secretion at low doses and inhibition of reabsorption at the higher dose. Aspirin is an example of such an agent.

There are two ways that an increase in the miscible pool of uric acid or in the serum concentration of uric acid (hyperuricemia) may occur: (1) the production of urate is increased to such a degree that the normal capacity for elimination is inadequate; or (2) the excretory routes for uric acid are unable to secrete even a normal volume of uric acid (1,2,3,5). The increased production is seen in certain types of primary gout, and in the secondary forms of gout such as in myeloproliferative disorders. Decreased excretion usually results in individuals who have a renal tubular dysfunction, as well as in patients with chronic renal disease who have a decreased nephron population.

GOUT

Gout is a form of arthritis clinically characterized by recurrent acute attacks of paroxysmal inflammation, usually involving a single peripheral joint. These attacks are ordinarily followed by periods of complete remission. The disease affects men more commonly than women, and is directly related to the deposit of monosodium urate crystals (Figure 2) in and about the joints as a result of a supersaturated (urate) body fluid (1,7).

The prime biochemical factor in the development of gout is hyperuricemia. Patients with hyperuricemia (greater than 7.0 mg%) are initially asymptomatic, and may remain so throughout life (1,2,3). Acute attacks of gout will eventually develop in about 15-25% of these individuals (1,3). These attacks tend to become more frequent and may cause chronic joint disease with permanent damage and deformity. Of greater



Figure 2. Uric acid crystals in urinary sediment (x 450).

significance is the occurrence of renal dysfunction from the deposit of uric acid crystals within the kidney. The majority of individuals with gout exhibit not only increased uric acid synthesis but also diminished renal excretion.

Some forms of hyperuricemia have been associated with primary enzyme defects, the most severe of which is a sex-linked form of hyperuricaciduria (Lesch-Nyhan). This disease is characterized by choreo-athetosis, spasticity, mental retardation, and self-mutilation (1,3). The enzymatic defect is a virtual absence of hypoxanthine-guanine phosphoribosyltransferase (HPRT) (1,2); this enzyme is concerned with the reutilization of guanine and hypoxanthine by nucleotide formation through combination of the free purine with the ribose phosphate group of phosphoribosylpyrophosphate (PRPP) (6). Incomplete forms of the HPRT deficiency lead to less severe manifestations, but all forms have excessive quantities of endogenously produced uric acid. The higher the quantity of residual HPRT, the less severe the clinical presentation (1,3). The enzyme defect is inherited in X-linked fashion.

A second specific enzyme abnormality is related to structural mutants of phosphoribosylpyrophosphate (PP-ribose-P) synthetase, with increased action resulting in reduced consumption of PP-ribose-P, a key substrate of purine biosynthesis (1,2,3). Glycogen storage disease, Type I, is also associated with an enzymatically induced hyperuricemia.

There are many primary disorders associated with hyperuricemia and clinical gout (secondary hyperuricemia) (1,3):

Hematologic disorders. It has been reported that as many as 10% of the patients with clinical

gout have a myeloproliferative or lymphoproliferative disorder. Hemolytic anemia, pernicious anemia, and sickle cell anemia have been associated with hyperuricemia. The mechanism is due to the rapid and increased destruction of cells with release of their chromatin-containing purine bases.

Endocrine disorders. Hypothyroidism, hypoparathyroidism, and hyperparathyroidism have been associated with hyperuricemia on the basis of diminished renal excretion. Diabetes insipidus of the Pitressin-resistant, nephrogenic type is also associated with hyperuricemia.

Cardiovascular disorders. Hypertension and an increased incidence of myocardial infarction have been associated with hyperuricemia (1,3). The increased rate of atheroma formation is based on the increased stickiness of platelets, which produces an increased rate of coagulation.

Renal disorders. Chronic renal failure results in hyperuricemia. However, the development of gouty arthritis is uncommon.

Drug-induced disorders. Salicylates in doses less than 3 grams per day produce retention of uric acid, but doses greater than 3 grams cause a uricosuric effect. There is marked individual variation. Pyrazinamide (PZA), an antituberculous drug, causes almost complete inhibition of tubular secretion of urate. Thiazide diuretics also elevate uric acid.

Hypouricemia. Serum uric acid concentrations of less than 2 mg per 100 ml are considered a clinically significant hypouricemia (8). The most likely causes are drugs such as aspirin, Allopurinol, X-ray contrast agents, and glyceryl guaiacolate. Disseminated carcinoma results in decreased concentrations of urate, most likely as a result of an alteration in the renal tubular handling of uric acid. Poor dietary intake of purine-containing elements contributes to the development of a low urate concentration. Several uncommon diseases have also been implicated (1,3,8).

DETERMINATION OF URIC ACID

Uric acid is determined on blood, urine, and body fluids. There are two major methods: colorimetric and enzymatic (1,3,9). The most commonly used colorimetric method depends on the ability of urate to reduce a reagent such as phosphotungstic acid to a colored product. Serum urate tends to coprecipitate with protein, and

Classification of Hyperuricemia

1. Idiopathic gout
2. Drug induced
 - a) Salicylates
 - b) Thiazide diuretics
 - c) Pyrazinamide
3. Hereditary gout
 - a) Lesch-Nyhan (X-linked) with virtual absence HPRT
 - b) Gout with partial absence HPRT
 - c) Increased synthesis PP-ribose-P
 - d) Glycogen storage disease, Type I
4. Secondary elevations
 - a) Hematologic
 - (1) Leukemia
 - (2) Lymphoma
 - (3) Hemolytic anemia
 - (4) Pernicious anemia
 - b) Endocrine
 - (1) Hypothyroidism
 - (2) Hypoparathyroidism
 - (3) Hyperparathyroidism
 - c) Cardiovascular
 - (1) Hypertension
 - (2) Myocardial infarction
 - d) Renal
 - (1) Chronic renal failure

therefore produces an error in the colorimetric determination. Colored reduction products also cause a turbidity that interferes with spectrophotometric measurements (9). Therefore the colorimetric methods, such as those used in the SMA systems [Technicon Corporation, Tarrytown, New York], measure all colored reducing products; these results are 1 mg per 100 ml higher than the true serum uric acid concentration (1).

Substances which interfere with the colorimetric procedures are ascorbic acid, caffeine, theophylline, and theobromine (9). An individual who drinks a caffeine-containing beverage prior to colorimetric determination of uric acid may have an erroneously elevated result. High glucose concentrations also produce erroneously high concentrations of urates.

The enzymatic method uses the enzyme uricase. This extremely accurate method measures only the true uric acid concentration. Since the enzyme is expensive, the determination of uric acid by the enzymatic method is usually not indicated, except in a gouty population.

The mean serum urate in males is about 5 mg per 100 ml (uricase method); in women, it is about

4 mg per 100 ml until after the menopause when the concentration approaches that of males. There is some skewing of the values to the right of a Gaussian distribution. Two positive standard deviations give a value of 7 mg per 100 ml (uricase method). Recalling that the theoretical saturation coefficient of uric acid is 6.5 mg per 100 ml, then all hyperuricemic individuals have serum that, in theory, is supersaturated with urate (1,2,3).

SUMMARY

Uric acid is the end-product of purine metabolism. It is formed from the degradation of nucleotide pairs from DNA and RNA. The substance is rapidly and almost completely filtered by the glomerulus, but is subsequently reabsorbed in the proximal tubules. Distal tubular secretion accounts for the amount of uric acid found in the urine. Hyperuricemia results from either increased production of uric acid, decreased excretion, or both. Approximately 20% of individuals with hyperuricemia (values greater than 7 mg per 100 ml) will develop symptoms of gout. Uric acid is increased in the serum and body fluids by either colorimetric or enzymatic methods.

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Policy

Instructions and Directives

BUMEDNOTE 5211 of 8 Oct 75: **Privacy Act statements for medical forms.** This notice transmits Privacy Act statements applicable to NAVMED- and BUMED-sponsored DD forms listed in the *Manual of the Medical Department*, chap 23, sec II. These statements may be duplicated locally until the forms themselves are revised.

BUMEDNOTE 6470 of 15 Oct 75: **Cardiac pacemakers.** To avoid the possibility of interference with pacemakers due to electromagnetic radiation, the implants listed below should be used for naval personnel. These cardiac pacemakers are not significantly affected at 200 volts/meter, 10 pulses per second, 1 millisecond pulse width, and 450 MHz.

<u>Manufacturer</u>	<u>Model Number</u>
American Optical Corporation	281143
Biotronik	IDP-44
Cordis Corporation	Atricor
Cordis Corporation	Omni Atricor
Pacesetter	BD-101
Starr Edwards	8116

BUMEDINST 4950.2C of 16 Oct 75: **Certificates of accomplishment/special instruction for visiting foreign trainees.** When a visiting foreign physician, dentist, nurse, or allied scientist completes training under Navy Medical Department sponsorship, a Certificate of Accomplishment is issued. Six weeks prior to the completion of such training, the following information on each trainee shall be submitted to BUMED Code 0011: name, grade, branch of service, and country; name and type of training received; inclusive dates of training; name of CO. A Certificate of Accomplishment will be signed by the Surgeon General, and mailed to the CO for signature and presentation.

Foreign enlisted personnel may receive locally issued Certificates of Special Instruction. The stub reflecting the scholastic record may also be issued to the trainee. BUMED Code 34 or Code 6 should

be advised of the certificate number issued to foreign hospital corpsmen and dental technicians respectively.

BUMEDINST 6320.4X of 21 Oct 75: Medical, dental, and subsistence rates and hospitalization bills; cost elements of. This instruction prescribes hospitalization, outpatient, and subsistence rates to be collected locally for medical and dental care, and for subsistence. Hospital meal rates are also prescribed.

Billings for treatment rendered will be made in accordance with NAVMED P-5020, "Financial Management Handbook," for BUMED-managed activities; and in accordance with NAVCOMPT Manual, para. 035125-035134 and 032501-6 for other naval activities. Billings shall be addressed to the individual primarily liable for charges, rather than to the insurance carrier. Patients or sponsors may be helped to complete hospitalization or insurance forms. Payment or partial payment by insurance companies may be accepted for credit to the patient's account.

At the specific request of the insurance carrier, cost elements of hospitalization bills may be furnished without charge. The statement of charges shall not exceed the applicable rate charged the patient, and shall not contain any information other than the charges, unless specifically requested by the patient.

BUMEDNOTE 6110 of 17 Nov 75: Wearing of contact lens by Class 1 and Class 2 aviation personnel. Correction of defective distant visual acuity by contact lens is now authorized for Class 2 aviation personnel (naval flight officers and other crewmembers not in actual control of aircraft, air traffic controllers) while engaging in flight duties. The individual must be well-adapted to the lens. A flight surgeon or aviation medical officer must authorize the wearing of contact lens. Contact lens are still prohibited for orthokeratology in flight personnel, and for any use while engaged in flight duty for Class 1 personnel (pilots). Procurement of lens under this notice is at the expense of the individual.

BUMEDINST 12000.5D of 18 Nov 75: Student trainees from accredited non-Federal institutions.

Trainees from accredited non-Federal institutions may be accepted for part of their training in naval medical and dental facilities. Although the individual command does not enter into any formal contract, a "memorandum of understanding" is prepared as the basis for participation in such a program. Trainees are given Excepted Schedule A appointments (without compensation), and may be appointed only to positions listed in this instruction.

BUMED-managed commands should forward any requests for such affiliations to BUMED Code 0011 via the CO, Naval Health Sciences Education and Training Command (HSETC Code 12). Other activities should forward their requests to BUMED via HSETC and their major claimant, as applicable.

Renewals of existing memorandums of understanding do not require BUMED approval if there are no significant changes in the provisions.

A list of all current memorandums of understanding, numbers of trainees, memorandums canceled or terminated since 1 July of the previous year, and memorandums that will remain in effect through the current fiscal year shall be sent to BUMED via HSETC by 15 October each year.

BUMEDINST 5212.4F of 24 Nov 75: Manual of the Medical Dept., US Navy. Ships and stations having a medical department are automatically furnished one copy of the *Manual of the Medical Dept.* (NAVMED P-117). A second copy is automatically provided if there is a dental department. Additional copies for official use, or copies for ships and stations without medical/dental personnel, may be requested from BUMED. Marine Corps activities should direct requests to the Commandant of the Marine Corps.

Personal copies may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Cost: \$5.10 per copy (binder not included). Active-duty personnel who purchase individual copies should so inform BUMED, and ask to be sent all future changes.

BUMEDNOTE 5211 of 2 Dec 75: Privacy Act statements for dental records. All dental commands, services, and departments will afford

patients the opportunity to read and sign DD Form 2005, Privacy Act Statement—Health Care Records. Patients will be given a copy of the statement, and a signed copy will be placed in their dental folder. If a patient refuses to sign the statement, the refusal will be recorded in the dental folder. Treatment will then be provided based on available information.

BUMEDINST 6700.5D of 22 Dec 75: Activation and inactivation of medical and dental spaces in ships and craft. The CO, Naval Medical Materiel Support Command (NAVMEDMATSUPPCOM) shall provide for funding and requisitioning of material for reactivation or fitting out of medical and dental space in ships and craft.

Vessels undergoing routine yard overhaul or short-term fleet rehabilitation and modernization (FRAM I) shall retain medical and dental material on board. If this is impossible, material shall be off-loaded to the nearest naval shipyard or naval activity. Subsequent funding and requisitioning of medical and dental material to refurbish allowances is the responsibility of the ship or craft. Excess equipment or supplies shall be reported to CO, NAVMEDMATSUPPCOM for disposition.

Ships and craft undergoing FRAM II, extensive overhaul, conversion, or inactivation shall inactivate medical and dental spaces in accordance with OPNAVINST 4770.5D and enclosure (1) to this instruction.

A letter report shall be forwarded to CO, NAVMEDMATSUPPCOM on each inactive ship scheduled for activation. The report shall include: inventory and condition of installed equipment on board; number of battle dressing stations, lifeboats, life rafts, gun mounts, and first-aid boxes; activation or commissioning date; and appropriate accounting instructions if the activated vessel is to be assigned to another governmental agency (including foreign governments).

Upon completion of inactivation procedures, a "Completion of Inactivation" file shall be retained on board. This file shall include: copy of Guide for Return of Ship or Craft to Active Status; inventory of medical and dental material retained; number of battle dressing stations, lifeboats, life rafts, gun mounts, and first-aid boxes; and copies of all documents transferring equipment to other ships and activities.

This instruction applies to all vessels except hospital ships, vessels required by status to be kept operative with either a complete or partial

allowance of material, and ships assigned to the Military Sealift Command under conditions other than mobilization.

BUMEDINST 4500.2C of 30 Dec 75: Excess personal property; screening and redistribution among medical and dental facilities. This instruction establishes procedures for screening and redistributing excess personal property that cannot be returned to the supply distribution system for credit. With the exceptions given below, it applies to all excess material in end-use status at BUMED-command activities, and to excess medical and dental material at other activities. Exceptions are:

- Material meeting criteria for return with credit set forth in NAVSUPINST 4440.57.
- Medical and dental material carried in the Navy Stock Account.
- Evacuation medical items covered by BUMEDINST 6700.24C.
- Medical and dental material designated as Prepositioned War Reserve Stock.
- Items covered in directives issued by other systems commands or bureaus.

Excess material not included in an exception category shall be reported to the Naval Medical Materiel Support Command (NAVMEDMATSUPPCOM) on Standard Form 120 when such material has a minimum value of \$100 and a minimum condition code of N-3, E-3, O-3, or R-1. A list of all such property will be published in the *Navy Medical and Dental Materiel Bulletin*.

Requests for excess property shall be submitted to NAVMEDMATSUPPCOM. NAVMEDMATSUPPCOM will furnish disposition instructions for excess material which cannot be redistributed. Excess material that does not meet reporting criteria set forth above shall be surveyed and destroyed or transferred to the property disposal officer.

BUMEDINST 6700.3B of 30 Dec 75: Medical and dental items recommended for standardization or testing; procedure for. Requests to *test and evaluate* medical and dental items should be forwarded via official channels to BUMED Code 46-2. At a minimum, such requests will include: name and address of supplier; product's model number, catalog number, or other identification; requisition cost; number of units required; site and duration of test; and testing protocol. Items to be tested shall be provided without charge, and

the Government shall not be responsible for them during testing. Items will be returned to the supplier after testing in "as is" condition; if subsequent purchase is made, a new item shall be furnished. A product evaluation shall be forwarded to BUMED Code 46-2 after completion of testing; these evaluations shall be labeled for "official use only," and shall not be released to industry without BUMED consent.

Recommendations for *standardization* of medical and dental items shall be forwarded to Naval Medical Materiel Support Command via the chain of command with a copy to BUMED Code 46-2. Recommendations shall include: name of item and descriptive data, including dosage form, strength and packaging size, unit cost, model and catalog number, name of manufacturer, and descriptive literature; present or anticipated usage rate per quarter; and justification for standardization. This justification must include a statement that no similar item is available through Federal sources.

BUMEDINST 4000.2 of 5 Jan 76: Integrated Logistic Support Plan relative to medical and dental equipment. Integrated logistic support (ILS) consists of all requirements and resources needed to evaluate, acquire, operate, and maintain an equipment item or entire system through its life cycle. The Assistant Chiefs, BUMED for Material Resources (Code 4) and Dentistry (Code 6) have overall responsibility for implementing and managing the ILS process as applicable to Navy medical and dental material and equipment. BUMED Codes 46-2 and 42 act as integrated logistic support managers for material acquisitions under their cognizance. At BUMED command activities, the chief of the Supply Service shall normally coordinate ILS planning and requirements; at non-BUMED activities this planning shall be accomplished by Medical Department representatives or other cognizant command representatives.

Requisitions for BUMED-controlled items shall be submitted to the CO, Naval Medical Materiel Support Command for review and technical approval. NAVMEDMATSUPPCOM will coordinate the evaluation of medical and dental equipment requirements, and submit appropriate recommendations to operational commanders. User activities may refer unusual problems concerning requirements, performance, and maintenance services to NAVMEDMATSUPPCOM for resolution.

The ILS planning process required by NAVMATINST 4000.20B does not alter existing programs for acquiring and managing medical and dental investment equipment. Rather, the ILS program reinforces current planning processes and highlights the need for comprehensive requirements planning, life cycle costing, and repair analysis. BUMED command activities shall submit life cycle cost estimates for all major medical and dental investment equipment with a single unit cost of \$15,000 or more, and shall consider fully pertinent items set forth in NAVMATINST 4000.20B for inclusion in future equipment justifications. Specific reporting requirements applicable to ILS planning are incorporated in enclosure (1) to BUMEDINST 4235.5E.

BUMEDINST 1500.11A of 15 Jan 76: Inservice Consultant/Lecturer Program. The Visiting Chiefs of Service Program is being expanded to include all established Medical Department education and training programs. The Naval Health Sciences Education and Training Command (HSETC) shall defray related costs for this program, subject to availability of education and training resources.

Activities desiring consultative/teaching services shall select an inservice consultant/lecturer and establish a mutually agreeable date for the visit. No later than four weeks before the visit, the requesting command shall send a letter of request to the CO, HSETC via the consultant's CO giving the name, grade, rank, and Social Security number or designator of the consultant; inclusive dates of consultant's temporary additional duty; and purpose of visit. By endorsement to HSETC, the consultant's CO shall indicate consultant's availability for the requested period. HSETC will issue a fund authorization letter to the CO for orders, and shall so inform the requesting command.

BUMEDINST 1520.21 of 28 Jan 76: Armed Forces Health Professions Scholarship (AFHPS) Program; functional responsibilities for. The CO, Naval Health Sciences Education and Training Command shall assume the following duties in regard to the AFHPS Program:

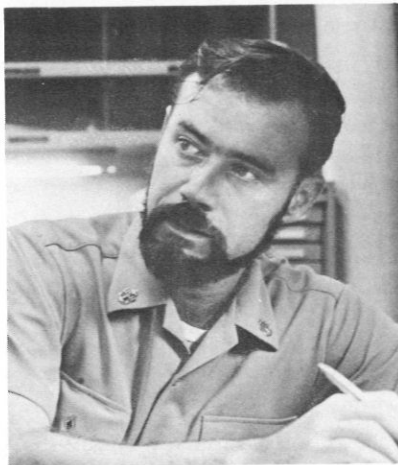
- Preparation and submission of budget and accounting data.
- Command responsibility for student officers while in an inactive duty status, and issuance of active duty for training orders.
- Review and approval of claims for reimbursement for authorized expenditures.

NAVMED Newsmakers

"Joining the Navy was the best decision of my life," says HMC **Gregory Cessna**, administrative assistant to the medical officer aboard the USS *Fort Fisher* (LSD 40). Chief Cessna's job—he's responsible for the medical records of more than 600 sailors and Marines assigned to the ship—requires maturity, responsibility, and dedication, plus real concern for others, virtues he says he acquired during his naval service.

Of his many assignments, two stand out as favorites: independent duty aboard the fleet oiler USS *Tappahannock*, and duty as a Navy recruiter in Kansas City, Missouri. "The *Tappahannock* was my best sea assignment because I was the only corpsman aboard the ship. I handled sick call, minor surgery, sanitation—you name it," the corpsman says. "I liked the recruiting job, too, mainly because I was helping fellow Missourians take advantage of the good life the Navy offers. It was very satisfying to help others better their lives by joining the Navy, as I did."

Mr. and Mrs. Bruce Henderson of Arvada, Colorado, always thought daughter Sherry was outstanding—and now the state agrees. LT **Sherry Kay Henderson** (MC), the Navy's third woman flight surgeon, has been named Colorado's Outstanding Young Woman of the Year for 1975. Read all about her in the 1975 awards volume *Outstanding Young Women of America*.



HMC Cessna: Deciding

California thinks that people who go Navy are outstanding, too. And to prove it, the Oxnard Chamber of Commerce just picked DTC **Arturo D. Lagasca** as Military Citizen of the Year for 1975. It's easy to understand their choice. A member of the Oxnard Community Relations Commission, DTC Lagasca responds to complaints about job discrimination and other community-related problems. He started a self-help program in race relations, and works with minorities to improve their confidence and develop their leadership ability. He also lends a hand to the cultural exchange efforts of local Filipino-American groups, is an advisor to the local teen club, and arranges entertainment programs for the Ventura County Juvenile Hall. All this in addition to his duties in the Branch Dental Facility of the Naval Construction Battalion Center, Port Hueneme. Outstanding!



DTC Lagasca: Outstanding

Navy dentistry claimed the professional spotlight during the annual meeting of the International College of Dentists in Chicago, when three dental officers were inducted into the College. Honored were CAPTs **Wallace D. Loo** (Retired), **Robert W. Bruce**, and **Joseph J. Lawrence, Jr.**

Also in Chicago, four Navy dental officers were inducted into the American College of Dentists during the College's annual meeting last October. The new fellows are CAPTs **Frank**



New London: Swinging

R. Ruliffson, Carleton J. McLeod, Don G. Garver, and Ronald D. Baker.

During these national and international dental events, VADM **Donald L. Custis** (MC), Navy Surgeon General, was elected to honorary membership in the American Dental Association in recognition of his strong support of Navy dentistry and the dental profession.

Naval Submarine Medical Center, New London has become a haven for swingers—ever since the Squadron TEN Wives Club donated an infants' swing to the pediatric clinic. CAPT **Vernon Burkhart** (MC), medical center CO, and staff pediatrician CDR **Gary Velat** (MC) accepted the gift last year on behalf of the Navy's bouncing babies.

Four Navy physicians participating in Southern California's first triage symposium helped prove that medical lessons learned in war ultimately serve the cause of peace. At the request of the San Bernardino County Department of Communications and Emergency Services, the medical officers shared with local civilian health care personnel the experience they gained from tours of duty in Vietnam. Participants in this initial triage training workshop were CAPTs **B.K. Defiebre**, **G.V. Frankhouser**, **K.I. MacDonald**, and **R.C. Meredith**.

Notes & Announcements

SOCIETY OF U.S. NAVY FLIGHT SURGEONS PLANNED

Plans are under way to establish a Society of U.S. Navy Flight Surgeons to advance the science, art, and practice of aerospace medicine and its application to naval aviation and the mission of the U.S. Navy. Announcements have been mailed to active-duty Navy flight surgeons, aviation medical officers, clinical specialists with a subspecialty as a flight surgeon, and retired flight surgeons whose addresses were available to the Bureau of Medicine and Surgery.

Individuals who join the Society prior to or during the Annual Scientific Meeting of the Aerospace Medical Association held this year 10-13 May in Bal Harbour, Florida, will become charter members. The initiation fee of \$5.00 will also serve as the first year's dues.

The first meeting of the Society will be held in Bal Harbour on 10 May 1976, following the Naval Aviation Medicine luncheon, a regular part of Aerospace Medical Association meetings. A constitution and by-laws will be adopted; four officers and six members of the Board of Governors will be elected.

The Society will sponsor a Command Flight Surgeon of the Year Award, and the Annual Richard E. Luehrs Memorial Award for outstanding performance in the practice of operational aviation medicine.

For additional information, contact:

Captain Frank H. Austin, Jr., MC, USN
Director of Aerospace Medicine (Code 51)
Bureau of Medicine and Surgery
Department of the Navy
Washington, D.C. 20372

Commercial telephone: (Area Code 202) 254-4361
Autovon: 294-4361

METHYL BROMIDE POISONING

A methyl bromide poisoning recently occurred aboard a Navy ship when an engineman was turning on exhaust fans while fumigating for giant African snails. *The engineman's beard made it impossible for his gas mask to fit properly.* He complained of smelling tear gas inside his mask

and left the hold to adjust it. Two hours later he complained of symptoms associated with methyl bromide poisoning: dizziness, nausea, vomiting, lassitude, weakness, and mental confusion. He was admitted to the intensive care unit and treated for methyl bromide poisoning, from which he fully recovered.

Methyl bromide is a colorless, odorless, highly toxic fumigant. Tear gas (chloropicrin) is added to this fumigant as a warning agent. Were it not for the warning provided by the chloropicrin, this incident would very likely have resulted in the engineman's death.—BUMED Code 553.

18TH NAVY OCCUPATIONAL HEALTH WORKSHOP: A REPORT

More than 200 health care professionals attended the 18th Navy Occupational Health Workshop in San Diego, California, held 6-10 October 1975. Highlight of the conference was the presentation of the Secretary of the Navy's Field Safety



RADM W.P. Arentzen (MC), CO of Naval Regional Medical Center San Diego, accepts the Secretary of the Navy's Field Safety Award from H. Robert Ferneau, special assistant to SECNAV.

Award to the Bureau of Medicine and Surgery. It was BUMED's first such award.

Labor and management officials participated in the conference, with Ted L. Merrill, deputy director of the American Federation of Government Employees' Labor Management, serving notice that unions would negotiate to secure additional safety and health provisions. Gerald F. Scannell, director of the Office of Federal Agency Safety Programs, Department of Labor, reviewed progress under Executive Order 11807 in improving Federal programs.

The week-long program also included presentations on all aspects of Navy occupational health, from budgeting and staffing through the administrative aspects of the program. Concurrent discussion sessions allowed participants to split up into special interest groups. One session, tailored for physicians and nurses, focused on medical topics. Another session, designed for industrial hygienists, safety officers, and others more concerned with technical matters affecting the workplace and environment, examined problems of noise, protective clothing and equipment and toxic hazards.—BUMED Code 55.

DENTAL CONTINUING EDUCATION COURSES SET FOR MAY 1976

The following dental continuing education courses will be offered during May 1976:

National Naval Dental Center, Bethesda, Maryland

Management Seminar 3-7 May 1976
(For BUMED-selected dental officers)

Eleventh Naval District, San Diego, California

Periodontics 10-12 May 1976

Consult BUMEDNOTE 1500 of 12 June 1975 when applying for dental continuing education courses, with the exception of courses administered by the Commandant, Eleventh Naval District. These requests should be submitted to the Commandant, Eleventh Naval District (Code 37).

Cross-country travel for dental continuing education courses and professional conferences will generally not be approved because of funding limitations. Similarly, travel from outside the Continental United States will generally not be approved.—BUMED Code 6112.

INTENSIVE CARE SYMPOSIUM ANNOUNCED

On Saturday, 15 May 1976, the National Naval Medical Center, Bethesda, Maryland, will sponsor a one-day symposium on the respiratory aspects of intensive care. An outstanding group of lecturers will discuss topics of clinical interest to physicians who manage critically ill patients. Topics already on the program include discussions of peritonitis and acute respiratory failure, possible disadvantages of continuous positive pressure breathing, newer aspects of respiratory care, mechanical ventilation in the newborn, and membrane oxygenation and blood transfusion in acute respiratory failure. There will be a question and answer period following each presentation.

Advance registration is essential. For further information, write: ICU Director, Box 149, National Naval Medical Center, Bethesda, Maryland 20014.

COMPARATIVE PATHOLOGY CONTINUING EDUCATION COURSE

The 3rd annual Comparative Pathology Course will be presented 10-12 May 1976 at the Armed Forces Institute of Pathology, Washington, D.C. Military and Federal service employees in the medical, veterinary, and other medical science fields should consult their agency's regulations for appropriate application procedures. Civilian physicians, veterinarians, and allied scientists are invited to apply and will be considered on a space available basis.

This course is designed to bring attention to disease processes in animals for which a similar entity occurs in man. Differences and similarities of pathologic lesions, as well as the biological behavior of specific entities will be compared in animals and man.

Application forms to attend this course may be obtained from: The Director, Armed Forces Institute of Pathology, (AFIP-EDE), Washington, D.C. 20306. Completed applications should be returned by 12 April 1976.

CAMP PENDLETON HOSTS PHARMACY SEMINAR

On 19 November 1975, the Pharmacy Service at Naval Regional Medical Center Camp Pendleton, California, hosted a one-day seminar for all naval pharmacists in Department of Defense Region 3.

The seminar afforded an opportunity for the exchange of general information, and for a discussion of such specific topics as unit dose dispensing, I.V. additive programs, clinical pharmacy, and radiopharmacy programs.

Seminar moderator was CDR R.D. Chansky (MSC), chief of the Pharmacy Service.

Plans are being made to hold similar seminars at Camp Pendleton every four months, and to invite participants from Air Force, Veterans Administration, and Public Health Service hospitals within the region.—ENS G.R. McDougall, MSC, USN, NRMC Camp Pendleton, California 92055.

JOSEPH RHEA NAMED FIRST CIVILIAN DIRECTOR OF OCHAMPUS

Joseph C. Rhea has been designated the first civilian Director of the Office of Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS).

Mr. Rhea comes to his new duties from the Health Care Service Corporation (Blue Cross) in Chicago, Illinois, where he served as executive assistant to the vice president. He has been involved in the management of various health care organizations and systems since 1961, and has been associated with the American Academy of Family Physicians and the National Association of Blue Shield Plans. He received his master of arts degree from Michigan State University in 1958 and completed advanced graduate work in 1961.—PAO, OASD(M&RA).

IN MEMORIAM

LCDR Julie Jeanne Dunn, NC, USN (RET), who spent over 16 years on active duty in the Navy, died on 29 November 1975 at the age of 40. A native of La Junta, Colorado, LCDR Dunn graduated from nurses' training in Denver, and was appointed an ensign in the Navy Nurse Corps in 1959. She served at Naval Hospitals Newport, Rhode Island; Portsmouth, New Hampshire; Lemoore, Oakland, and San Diego, California; Chelsea, Massachusetts; Bethesda, Maryland; Taiwan; Yokosuka; and aboard the USS *Sanctuary* off Vietnam.

LCDR Dunn held the National Defense Service Medal, Navy Achievement Medal, Vietnam Service Medal, Navy Pistol Marksmanship Ribbon,

and Vietnamese Armed Forces Honor Medal First Class.

LT Robert Lee Stratman, MSC, USN died at Brooke Army Medical Center, Ft Sam Houston, Texas, on 30 December 1975 at the age of 34. LT Stratman received fatal burns over much of his body while rescuing his family from their burning home at Marine Corps Base, Camp Lejeune, North Carolina,



LT R.L. Stratman
MSC, USN

on 21 December 1975. He had reentered the burning house in a successful effort to save the life of one of his small children who was trapped in the home.

LT Stratman, who was serving as the Second Marine Division preventive medicine officer at the time of this tragedy, was a veteran of 15 years of naval service. A native of Superior, Nebraska, he enlisted in 1961 and received recruit training at Naval Training Center, San Diego. Afterwards he was assigned to USS *Union* (AKA-106) as a seaman apprentice.

Following his later graduation from the San Diego Hospital Corps School, he served at Naval Hospital and Naval Aerospace Medical Center, Pensacola; U.S. Naval Station, Argentia, Newfoundland; aboard the USS *Sanctuary* (AH-17); Naval Hospital Jacksonville; and at U.S. Naval Station, Bermuda. He was commissioned as an ensign in the Medical Service Corps in September 1971, and served at Naval Regional Medical Center Portsmouth, Virginia, before reporting to his last command in June 1974.

Graveside ceremonies were held at Fayetteville, Tennessee, on 3 January 1976, with full military honors provided by members of the 2d Medical Battalion and other Camp Lejeune units, and with Masonic rites provided by the Fayetteville Lodge.

LT Stratman is survived by his widow Clista, four children—Jennifer, Samuel, Edward, and Karl—his parents, two sisters, and three brothers.

A special fund has been established to aid the family. Donations may be deposited in the Robert Stratman Fund at the First Citizens Bank and Trust Company branch bank, Naval Regional Medical Center, Camp Lejeune, North Carolina 28542. The account number is 214-13-20-289.

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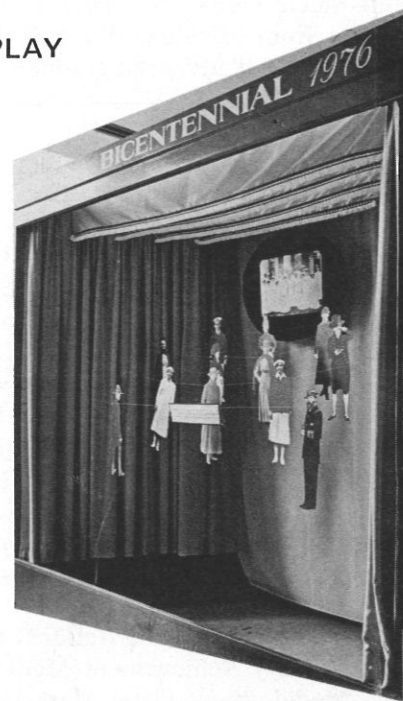


THIRD CLASS MAIL

GREAT LAKES BICENTENNIAL DISPLAY



A Bicentennial display of Navy medicine's 200 years is attracting visitors to Naval Regional Medical Center Great Lakes, Illinois. The display presents a capsule version of Medical Department history through photo montages and brief narratives mounted on 8'x8' walls. The walls are braced to form triangles. Flags, uniforms, and a videotape cassette presentation give the display a lively look.



U.S. NAVY MEDICINE